B A T T E R Y B O O S T E R

S E R I E S :

P O W E R 1 2 V / 2 4 V

User's manual

You have just purchased a **SOS STARTER**! Congratulations. This product has been carefully engineered and is the result of 30 years of experience and research It has been designed with modern high quality components to give even the most demanding professional the quality and convenience expected in a portable power booster.
Kindly read carefully these instructions to familiarise yourself with all the features before using your **SOS STARTER**. Keep this information for future references.

IMPORTANT WARNING

The SOS STARTER has to be always kept fully charged. Never let the battery be completely unloaded.
Any person who uses the SOS STARTER battery booster without showing at least one green LED turned on when tested, may cause an irreversible damage to the battery (deep discharge causing the destruction of one or several cells) will not be covered by the Warranty.

TECHNICAL SPECIFICATIONS

1. The boost rate of the **SOS STARTER** varies depending on the type and can reach up to 1'800 A (peak amps) for both 12V & 24V. In case of shortly repeated jump-starts, it is necessary to wait a few minutes between each trial. You have up to 700 cranking amps for each jump-start when fully loaded.
2. Equipped with electronic protection against dangerous voltage spikes, which can damage the electronics of your vehicle.
3. **SOS STARTER** is equipped on its Printed Circuit Board with a varistor, which protects the electronic components of your vehicle.
4. The battery of the **SOS STARTER** is a sealed lead acid battery. It is approved for air transportation (I.A.T.A.).
5. Cables have a cross section of 50 mm^2, allowing an excellent conductivity and practically no loss of energy.
6. The cigarette lighter socket is as well a source of energy (12 VDC), protected by a circuit breaker of 16 A.

DIRECTIONS FOR USE

Follow carefully the photo instructions on the back sticker of the **SOS STARTER**:

This unit is designed for 12V & 24V batteries.

For 12V applications, connect the plug of the red cable into the 12V socket (left) by inserting it and turning the plug clockwise.

For 24V applications, connect the plug of the red cable into the 24V socket (right) by inserting it and turning the plug clockwise.

1. Choose the 12V or 24V application.
2. Make sure the battery of the **SOS STARTER** is charged (min. 4 LEDs) and that the main battery switch is on **OFF**.
3. Gear in neutral - Automatic on **P**. Hand break ON.
4. Connect the **RED** cable to the **12V** or the **24V Outlet** depending on your requirement.
5. Then connect the **RED** clamp on the positive pole of the battery. Beware of moving parts (Fan belt, etc…).
6. Connect the **BLACK** clamp to the engine or a grounded metal part if you suspect that the battery is short circuited or damaged. If your battery is only low you can connect it to the negative pole of the battery.
7. **For 12V only** and in case of an inversed connection, the reversed **Polarity Alarm** will set off.
8. If necessary, correct by reversing clamps.
9. Turn the Main Battery Switch to the **ON** position: Press and rotate to the right.
10. Start the Engine. **NEVER INSIST ON THE IGNITION FOR MORE THAN 10 SECONDES. WAIT 2 MINUTES BEFORE TRYING AGAIN THE IGNITION, TO ALLOW THE BATTERY AND THE MAIN BATTERY SWITCH TO COOL OFF.**
11. Turn the Main Battery Switch **OFF** by pressing and rotating to the left.
12. Disconnect first the **BLACK** clamp
13. Then the **RED** clamp and put them away in their holsters.
14. Recharge the **SOS STARTER** immediately.

The Main Battery Switch must be on **OFF** position for storage and transporting the **SOS STARTER**. Beware: Lying on the Main Battery Switch could activate the power in the clamps.

CHARGING

Most important of all:
KEEP THE UNIT ALWAYS FULLY CHARGED

Recharging is done with the Main Battery Switch on **OFF** position, unless you are charging through the clamps.

Before the first use:
Charge your SOS STARTER for at least 12 hours.

POWER LEVEL
To test the power level of the battery, press the red test button for 10 sec. One to five LED will lighten. Do not use unless at least one green LED turns **ON**.

ATTENTION: In case only the 3 LEDs turn ON, you have to immediately recharge the unit until it's fully charged (minimum 12 hours). IN ANY CASE DO NOT USE IT. There is DANGER (battery destruction).

The more the battery is fully charged the stronger power the unit will deliver. So recharge your **SOS STARTER** each time you have used it. Disconnect it from the charger only when you need to use it again.

The energy used to jump start a vehicle can be generated back to the **SOS STARTER** from the vehicle's alternator, by simply leaving the cables on the vehicle's battery, motor running, for 2 to 3 minutes. Be smart and use this **FREE** energy.

STORAGE:
Recharge your unit before putting it away. If you do not use it, recharge it every 4 months to preserve the life & battery capacity of the unit.

THE 24V CHARGER

The SOS CHARGER has been specifically designed for the **SOS STARTER**. It includes an automatic regulator, which allows you to leave the unit under permanent charge (**highly recommended**) without damaging the Battery.

Only use the SOS 24V CHARGER as the SOS 12V Charging Cable will not recharge the 24V system. The cigarette lighter socket is 12V only and can not be used to charge the 24V system. Overcharging and/or under-charging will cause irreversible damages to the battery.

POLARITY ALARM

In case of an inversed connection of the clamps, the reversed polarity alarm will set off the BUZZER. Correct by reversing the clamps.

But **ATTENTION**: you need at least 3 V in the system to hear the alarm.

MAINTAINING 12V TENSION

To avoid loosing the electronic memories in your 12V vehicle (radio, computer,...), simply connect the 12 V charging cable into the cigarette lighter socket and to the SOS STARTER. In case your cigarette lighter is not connected with the ignition key turned off (as in MB, Opel, Renault), turn the ignition key to position 1. To check, see if the green LED on the 12V charging cable turns ON when plug in the cigarette lighter of your vehicle.

PORTABLE ENERGY

The **SOS STARTER** is an excellent source of portable energy, for all type of 12 VDC electrical appliances, such as searchlights, small refrigerators, mobile phones, air compressors, etc. Simply connect them into the cigarette lighter socket of the **SOS STARTER**. Beware! There is relatively little energy available, 16-19 Ah, due to energy drop only 40-50 % of the total energy is available for this kind of use.

Example of usage with a portable refrigerator of 24 watt: 24 VA / 12 V = 2 A of energy use. The refrigerator will work up to 9 V with a POWER with a 16 Ah battery. 6 Ah to 9 V are available. 6 Ah divided by 2 A = 3 hours. With a 48 watt appliance, you have then 1 ½ hour.

WARRANTY:

24 months warranty on unit
6 months on Battery

The warranty is void if: overcharged, remained uncharged over time, used when not charged, misused, melting of Main Battery Switch components, immersion in liquid.

IMPORTANT REMINDER

ALWAYS KEEP FULLY CHARGED using only supplied charger. If not, Battery will have to be replaced: **NOT UNDER WARRANTY IF:**

1. Undercharged = empty over extended time
2. Overcharged using an ill adopted charger.
3. Used in a discharged state, with only 3 LED

RECYCLE: Recycle as a car battery (LEAD)

Keep clear of children's reach.